

# Updating and Implementing Geospatial Image Digitization and Workflow Standards



COLLEGE OF  
INFORMATION  
STUDIES

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## Introduction

This poster identifies key strategic areas to consider in developing a standard digitization protocol in order to capture the unique aspects of geospatial images. It also enumerates the process of implementing these solutions into an institution's regular digitization workflow. This study draws insights from experiences at the National Agricultural Library.

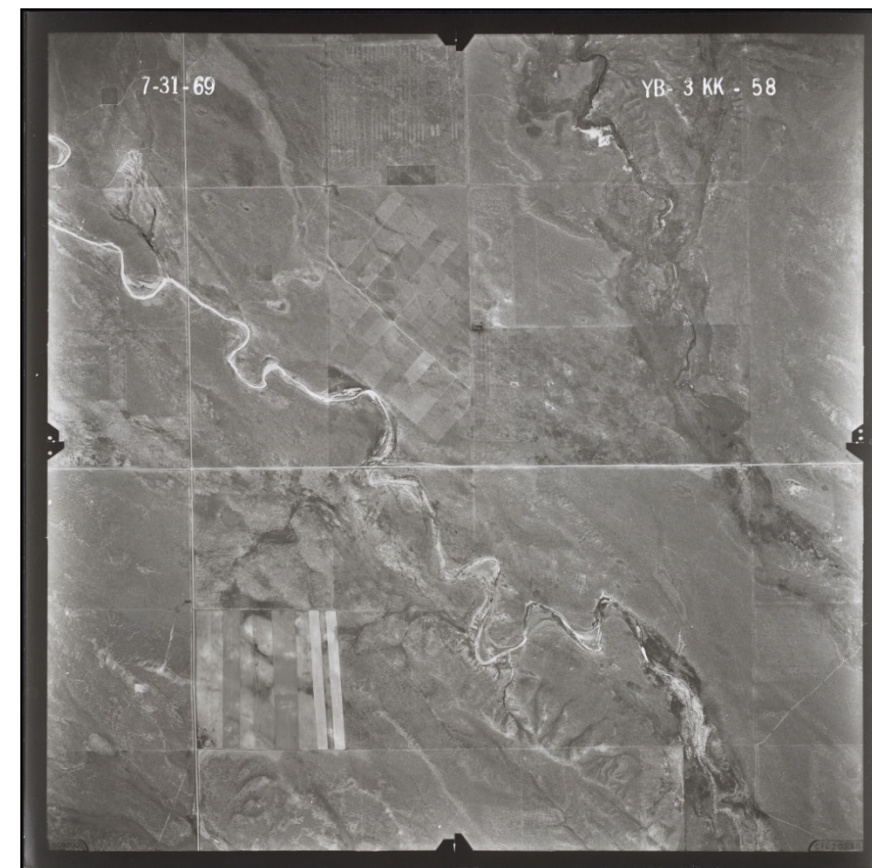
## Challenge

While general standards for image digitization exist, file formats, metadata standards, and quality control tools have changed. In addition, current universal guidelines do not exist for institutions with aerial photography collections. As a result, the unique attributes of aerial photographic materials are seldom considered during the digitization process.

## Methods

- Consulted prominent aerial image collections and repositories for common standards; compiled aerial image strategic plan based on findings
- Digitized a test run of aerial images from affiliated Long Term Agro-ecosystem Research sites for an opportunity to troubleshoot and modify workflow and standards to suit the newly formed collection.

## Strategic areas to consider in developing and implementing a data management plan for aerial photographs:



### Ingest

#### Collection Development

- Used overall NAL policy as a basis and added components specifically for aerial images

#### Requirements

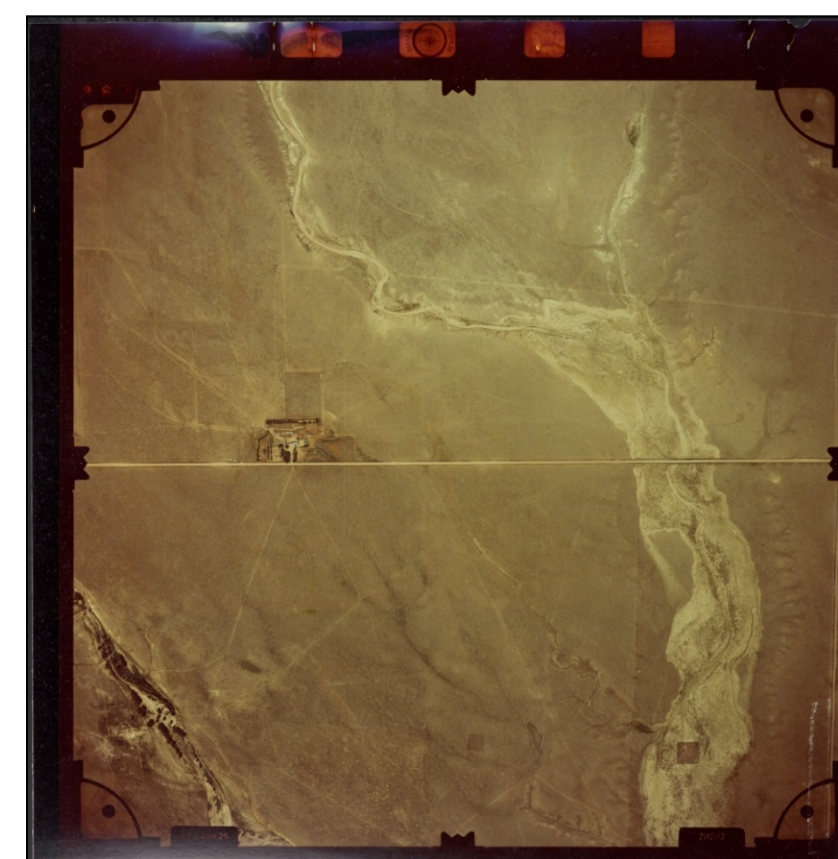
- Staff, budget, hardware / software, training

#### Submission Information Package

- Item information requirements, optional item information, formats accepted

#### Workflow / Timelines

- Flow chart established for overall process; more detailed flow charts created for each individual process section
- Time to complete each step estimated



### Digitization

#### Standards

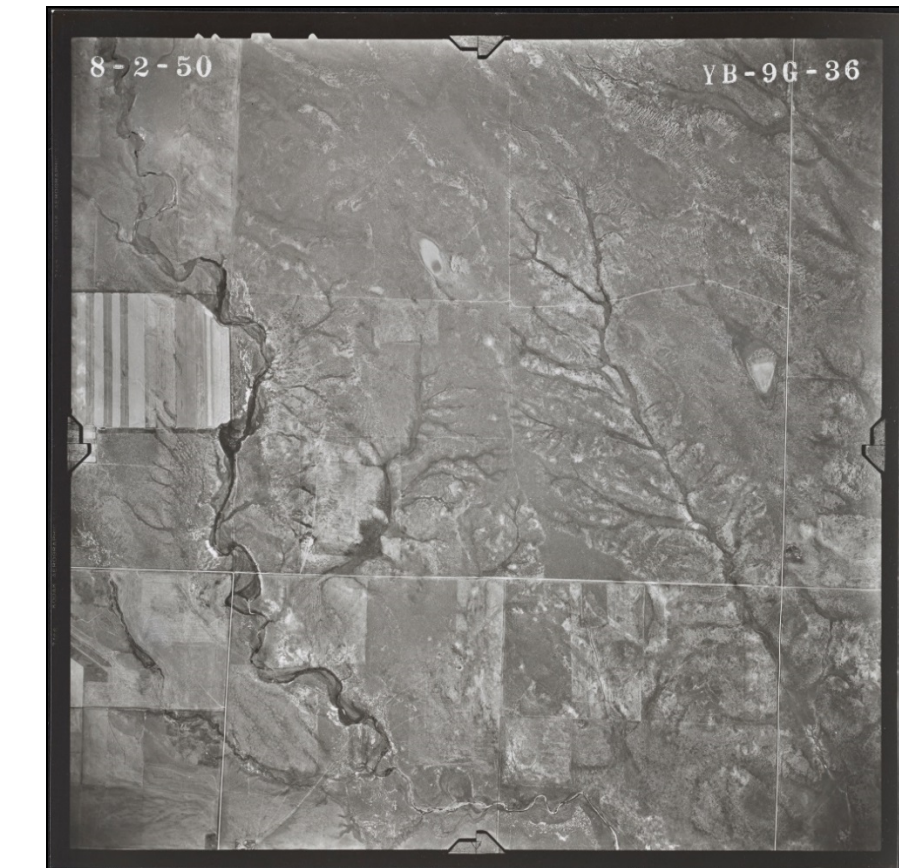
- Preservation and access copy specifications
- Golden Thread software implemented for digitization quality control
- Collection-specific digitization job submission forms created to maintain consistency between acquisitions

#### Naming Convention

- Year\_Area\_Roll\_Frame.ext format used for initial scans

#### Metadata

- ISO 19115:2003 North American Profile for geospatial data; 19115-2 for gridded datasets
- Geospatial, administrative, and image metadata added using ArcGIS



### Preservation/ Access

#### Access

- Web interface for public access – individual images and mosaic displays
- Dissemination Information Package established

#### Preservation / Storage

- Temporary storage and preservation / dark archive storage established

#### Quality Control

- Software recommended for validating transfers, verifying that copies match original, and verifying integrity of migrated data among other functions
- Schedule – when and how often to perform quality control measures
- Reformatting guidelines established

## Conclusions

With a clear policy and workflow protocol outlined at every step of the process using current tools and technology, future accession and digitization of visual materials will be more efficient, interoperability among aerial image collections will be improved, and patrons will have more convenient access to the materials they need in the formats they require.

## Further Information

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